IN THE CLAIMS

The following claim set replaces all prior versions, and listings, of claims in the application:

- 1. (Currently Amended) A hydrophobic surface-coated substrate which comprises a substrate, a silicon oxide anchor layer on said substrate, and a hydrophobic coating layer covering a surface of said anchor layer, wherein said surface of said silicon dioxide oxide anchor layer exhibits a root mean square (RMS) surface roughness of less than about 6.0 nm and a haze value of less than about 2.0%.
 - 2. (Canceled)
- 3. (Previously Presented) The substrate of claim 1, wherein the anchor layer exhibits a RMS surface roughness of greater than about 4.0 nm.
- 4. (Original) The substrate of claim 1, wherein the hydrophobic coating further comprises the humidified vapor-deposited reaction product of at least one alkylchlorosilane applied over the anchor layer.
- 5. (Original) The substrate of claim 4, wherein the alkylchlorosilane is dimethyldichlorosilane or trimethylchlorosilane.
- 6. (Original) The substrate of claim 1, wherein the hydrophobic coating comprises a layer of a humidified vapor-deposited reaction product of dimethyldichlorosilane (DMDCS) on the silicon oxide anchor layer, and a layer of a humidified vapor-deposited reaction product of trimethylchlorosilane (TMCS) applied over the DMDCS layer.
- 7. (Original) The substrate of claim 1, wherein the hydrophobic coating comprises a layer of polydimethylsiloxane (PDMSO) chemically bound to said anchor layer.
- 8. (Original) The substrate of claim 1, wherein the hydrophobic coating comprises a layer of cross-linked polysiloxane chemically bound to said anchor layer.

Nestor MURPHY et al Serial No. 09/921,303 December 8, 2003

- 9. (Original) The substrate of claim 8, wherein the hydrophobic coating comprises at least one layer which is the humidified vapor-deposited reaction product of dimethyldichlorosilane (DMDCS) or trimethylchlorosilane (TMCS) applied over the cross-linked polysiloxane layer.
 - 10. (Cancelled)
 - 11. (Cancelled).
- 12. (Currently Amended) The substrate of claim 10 claim 1, wherein the anchor layer exhibits a haze value of less than about 1.5%.
- 13. (Previously Presented) A substrate as in claim 1, wherein anchor layer is comprised of a humidified reaction product of silicon tetrachloride vapor deposited at a relative humidity of less than about 50%.
- 14. (Original) The substrate of claim 13, wherein the silicon tetrachloride is vapordeposited at a relative humidity of less than about 45%.
- 15. (Original) The substrate of claim 13, wherein the silicon tetrachloride is vapordeposited at a relative humidity of less than about 40%.
- 16. (Original) The substrate of claim 13, wherein said hydrophobic coating is comprised of the humidified reaction product of said silicon tetrachloride and an alkylchlorosilane.
- 17. (Original) The substrate of claim 16, wherein said alkylchlorosilane includes trimethylchlorosilane (TMCS).
- 18. (Original) The substrate of claim 17, wherein said silicon tetrachloride and TMCS are vapor-deposited as a mixture.
- 19. (Original) The substrate of claim 18, wherein said mixture contains a ratio of said silicon tetrachloride to TMCS of between about 4.0:.05 to about 4.0:1.5.

Nestor MURPHY t al Serial No. 09/921,303 December 8, 2003

- 20. (Original) The substrate of claim 18, wherein said mixture contains a ratio of said silicon tetrachloride to TMCS of about 4.0:1.0.
 - 21 54 (Cancelled).
- 55. (Previously Presented) A coated glass substrate made by a process comprising:
 - (a) contacting a surface of the glass substrate to be coated with a silicon tetrachloride vapor for a time sufficient to form a silicon oxide layer on the surface of the glass substrate; and then
 - (b) simultaneously contacting the silicon oxide layer with vapors of silicon tetrachloride and dimethyldichlorosilane (DMDCS) for a time sufficient to form a cross-linked layer of polydimethylsiloxane (PDMSO).
- 56. (Original) The substrate of claim 4, wherein the alkylchlorosilanes comprise dimethyldichlorosilane and methyltrichlorosilane.
- 57. (Original) The substrate of claim 4, wherein the alkylchlorosilanes are dimethyldichlorosilane and methyltrichlorosilane and are added in equimolar amounts.
- 58. (Original) The substrate of claim 56 wherein the ratios of dimethyldichlorosilane and methyltrichlorosilane are in the range of from 5 part to 1 part to about 1 part to 3 part respectively by weight.
- 59. (Original) The substrate of claim 56 wherein the alkyl chlorosilane layer is capped with methyltrichlorosilane.
- 60. (Previously Presented) The substrate of claim 56 wherein the alkyl chlorosilane layer is capped with CF₂FCO(CH₂)₃SiCl₂CH₃.
- 61. (Original) The substrate of claim 1 wherein the hydrophobic coating comprises a layer of a humidified vapor-deposited reaction product of dimethyldichlorosilane and methyltrichlorosilane on the silicon oxide anchor layer, and a

Nestor MURPHY t al Serial No. 09/921,303 December 8, 2003

capping layer of a humidified vapor-deposited reaction product of trimethyl chlorosilane applied over the DMDCS and TMCS layer.

- 62. (Previously Presented) The substrate of claim 4 wherein silicon tetrachloride is added to a reaction chamber in an equimolar amount with at least one alkylchlorosilane selected from the group consisting of dimethyldichlorosilane, methyltrichlorosilane, trimethylchlorosilane and chlorofluoroalkylsilane.
- 63. (Previously Presented) The substrate of claim 62 comprising CF₂FCO(CH₂)₃SiCl₂CH₃ as a capping layer.
 - 64 70 (Canceled).
- 71. (Previously Presented) The substrate of claim 1, wherein the anchor layer exhibits a RMS surface roughness of less than about 5.0 nm.
- 72. (Previously Presented) The substrate of claim 1, wherein the anchor layer exhibits a RMS surface roughness of between about 4.0 nm to about 6.0 nm.
- 73. (Currently Amended) A hydrophobic surface-coated substrate which comprises a substrate, a silicon oxide anchor layer on said substrate, and a hydrophobic coating layer covering a surface of said anchor layer, wherein said surface of said anchor layer exhibits a root mean square surface roughness of greater than about 4.0 nm and less than about 6.0 nm and wherein the hydrophobic coating layer is the humidified vapor-deposited reaction product of at least one alkylchlorosilane which is selected from the group consisting of dimethyldichlorosilane (DMDCS), (DMDCS), methylchlorosilane (MCS) and trimethylchlorosilane (TMCS).
- 74. (Previously Presented) The substrate of claim 73, wherein the hydrophobic coating comprises a layer of a humidified vapor-deposited reaction product of DMDCS on the silicon oxide anchor layer, and a layer of a humidified vapor-deposited reaction product of TMCS applied over the DMDCS layer.

Nestor MURPHY et al Serial No. 09/921,303 December 8, 2003

- 75. (Previously Presented) The substrate of claim 73, wherein the hydrophobic coating comprises a layer of polydimethylsiloxane (PDMSO) chemically bound to said anchor layer.
- 76. (Previously Presented) The substrate of claim 73, wherein the hydrophobic coating comprises a layer of cross-linked polysiloxane chemically bound to said anchor layer.
- 77. (Previously Presented) The substrate of claim 76, wherein the hydrophobic coating comprises at least one layer which is the humidified vapor-deposited reaction product of dimethyldichlorosilane (DMDCS) or trimethylchlorosilane (TMCS) applied over the cross-linked polysiloxane layer.
- 78. (Previously Presented) The substrate of claim 73, wherein the alkylchlorosilane includes dimethyldichlorosilane and methyltrichlorosilane in equimolar amounts.
- 79. (Previously Presented) The substrate of claim 73, wherein the alkylchlorosilane includes dimethyldichlorosilane and methyltrichlorosilane in ratios of dimethyldichlorosilane and methyltrichlorosilane within range of from 5 part to 1 part to about 1 part to 3 part respectively by weight.